

UNITED STATES DISTRICT COURT SOUTHERN DISTRICT OF OHIO
WESTERN DIVISION

HENRY WILLIAMS

*

Case No. C-1-02-533

Plaintiff,

*

Judge Beckwith

vs.

*

MILTON CAN COMPANY, INC.
and BWAY MANUFACTURING

*

AFFIDAVIT OF EXPERT
GEORGE L. SMITH, Ph.D., PE

*

Defendants.

In the state of Ohio
County of Franklin

Now comes George L. Smith, having been duly cautioned and sworn and states as follows:

- 1). I am an adult, and competent to testify to the following matters.
- 2). The attached CV (Ex. A) is a true and accurate summary of my education, teaching positions, work history, and professional memberships.
- 3). I have been employed as a safety consultant on behalf of the Plaintiff in this case, and have personally reviewed the deposition testimony of: Henry Williams, Bob Francia, Allen Artis, Charles Kobman, Greg Janigan, Ralph Briggs, Gerald Hanifen, and Walter Valentine.
- 4). I have reviewed photographs taken of the location where this incident occurred.
- 5). I am a specialist in human factors engineering and ergonomics who has been qualified to testify in numerous courts in various jurisdictions in the United States, including many times in Ohio courts regarding matters relating to workplace safety, machine guarding and the like.

6). Based on information received and reviewed, Henry Williams was injured on July 29, 2000 when, as an employee of B-Way, he was crushed by a fork truck operated by co-employee Robert Francia.

7). Williams testified he was in the process of refueling a fork truck. He was on an exterior dock reattaching a full liquid petroleum tank when Francia backed a fork truck into him pinning him between the two 10,000 pound vehicles. It is my opinion to a high degree of human factor engineering certainty that B-Way knew that Bob Francia's reckless driving posed a dangerous instrumentality to pedestrians in the plant.

My opinion in this regard is based in part on the following:

B-Way's Production Manager, Walter Valentine testified he knew Francia had numerous incidents involving reckless operation of the fork trucks. Valentine knew that Francia had dropped cans on more than one occasion, had almost hit at least two co-workers, had driven a fork truck partially off of a loading dock, and had struck a valve causing flooding in the salvage area. Valentine suspended Francia from the truck based on his safety concern for pedestrians. According to Valentine, Francia was not supposed to return to driving fork trucks until he was retrained by the company's designated trainer, Charles Kobman. Supervisor Ralph Briggs was supposed to ensure Francia was retrained.

Francia testified he was never suspended, and was never retrained. Francia testified that he offered to surrender his fork truck license on at least two (2) occasions. when supervisors confronted him about his reckless driving. Approximately two weeks before Williams was crushed, Francia almost struck yet another co-worker, Allen Artis. This was yet again taken to management, with no further discipline imposed. Artis testified about numerous prior near misses involving Francia and pedestrians.

8). It is my further opinion that to high degree of human factor engineering that B-Way knew that employees exposed to Francia's reckless driving were substantially certain to be injured.

My opinion in this regard is based in part on the following:

Charles Kobman, the employee designated by management as fork truck safety trainer, testified that fork trucks are the most significant hazard and risk in the facility. He referred to fork trucks as a "loaded gun" and a "deadly weapon". Kobman was responsible for re-certifying drivers with poor safety performance. In his position, foremen were obligated to call incidents to his attention. Despite this, Kobman was only told of one isolated incident involving Francia spilling cans. He was not told Francia drove partially off the loading dock. He was not told of the near miss with Wayne Pike nor the near miss with Allen Artis. He was not told of the incident where Francia hit a valve, flooding a portion of the plant. Kobman testified that each of these instances would justify retraining on safe fork truck operation. He testified that a second infraction following retraining could justify permanent removal, but definitely following a fourth incident.

In this industrial plant setting, a foreman is acting as management on the plant floor. The knowledge possessed by one or more foremen is knowledge of management because the foreman has the immediate responsibility over the crew. In this case the knowledge of the foremen was the same as the knowledge of Kobman.

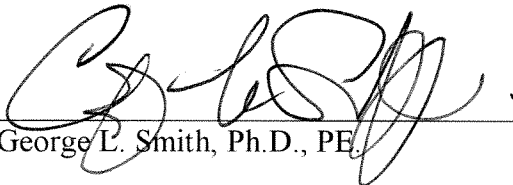
Kobman's knowledge is imputed to management, as management delegated the duties to train and oversee certification of fork trucks to Kobman. B-Way's designated trainer was aware of the company's obligations under the Occupational Safety and Health Act of 1970, as amended. (OSHA). Pursuant to 29 CFR ch. XVII section 1910.178 (l)(4), B-Way was required to provide refresher training to Francia after each of the numerous incidents and near misses brought to management's attention. Not only did B-Way fail to provide this refresher training, they failed to provide this information to their designated trainer. Although management was aware of multiple infractions. Kobman was only told about one incident where Francia spilled a load of cans.

Francia doesn't recall ever being suspended nor retrained. B-Way Production Manager Valentine testified he suspended Francia after he almost hit Wayne Pike. It was his intention not to permit Francia to return to driving until he was retrained based on Valentine's concern that someone was going to be hurt by Francia. Valentine testified he would permanently suspend Francia for a second near miss following retraining. B-Way management was acutely aware of numerous near misses involving Francia and pedestrians, as well as actual collisions with inanimate objects. By their own policies and procedures Francia should have been permanently barred from operating fork trucks before he finally struck a pedestrian. B-Way knew Francia was reckless and was operating a "loaded gun" and "deadly weapon". Based on his prior incidents, known to B-Way, it was only a matter of time before Francia seriously injured someone.

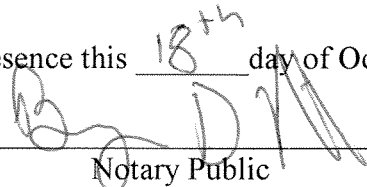
9). It is my further opinion that B-Way, through its practices and procedures acted to require Williams and Francia to perform their duties on the date of injury. Although there is no testimony that any supervisor specifically directed Williams to drive his fork truck to the dock to refuel it, Briggs, Williams' supervisor, specifically requested Williams' participation in inventory day. Work groups were assigned specific areas of the plant to inventory. Inherent in the inventory process, materials must be moved to enable a complete inventory count. This required the use of fork trucks, which require fuel to operate. Williams testified he went to the nearest refueling point. Refueling and driving the fork truck were an integral part of Williams assigned duties on July 29, 2000.

10). These opinions are based on the evidence known by me at this time, if additional facts and information come to light, I may supplement these opinions.

Further affiant sayeth naught.


George L. Smith, Ph.D., PE

Sworn to before me and subscribed in my presence this 18th day of October 2004.


Notary Public



BRYCE D. RINKER
Notary Public, State of Ohio
My Commission Expires 07-07-08

George L. Smith, Ph.D., PE, May 2004

GEORGE L. SMITH, Ph.D., PE

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University Contact:

Department of Industrial, Welding &
Systems Engineering
The Ohio State University
Baker Systems Engineering Building
Columbus, OH 43210

Birth date. September 6, 1935

Academic Rank.

Contract Professor, School of Allied Medical Professions, 9/'95 - present
Professor Emeritus, 7/1/'95
Associate Dean, Academic Affairs, College of Engineering, 10/'91-6/'93
Adjunct Professor, Industrial Engineering, New Univ. of Lisbon, Portugal 6/'90
Chair, Industrial & Systems Engineering, 7/'82-6/'94
Professor 10/'77-6/'95
Associate Professor 10/'72-10/'77
Assistant Professor 10/'68-10/'72

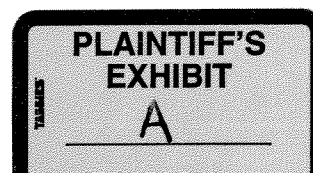
Degrees and Certifications.

Oklahoma State University, 1969, Ph.D., Industrial Engineering
Lehigh University, 1967, M.S., Psychology
Lehigh University, 1959, M.S., Industrial Engineering
Pennsylvania State University, 1957, B.S., Industrial Engineering
Registered Professional Engineer, Pennsylvania
Arbitrator, Federal Mediation and Conciliation Service

Research Leadership.

Co-Principal Investigator (with W. T. Morris), "The Development of Productivity Measurement Systems for Administrative Computing and Information Services", National Science Foundation, RANN, \$125,000.
Project Director, "Developing an Interface Between Engineering and Social Sciences", Alfred P. Sloan Foundation, \$300,000.
Principal Investigator, "Some Feasible Bases for the Design of an Alcohol Interlock System", General Motors Corporation, \$15,000.
Principal Investigator, "Contingency Planning for Electrical Emergencies", NRRI, U.S. Department of Energy.
Principal Investigator, "Developing Measures of Power Plant Productivity", NRRI, U.S. Department of Energy.
Co-Principal Investigator (with R. W. Backoff), "The Effect of Manpower on the Effectiveness of Fire Fighting", Division of Fire, City of Columbus, Ohio, \$50,000.

Research Leadership(cont.).



George L. Smith, Ph.D., PE, May 2004

Principal Investigator, "Course Development for Manufacturing Systems and Engineering", AT&T Foundation, 1986-1989, \$90,000.

Principal Investigator, "A Research Agenda for Production and Service Systems", National Science Foundation, 1989, \$18,000.

Director, Center for Advanced Studies in Telecommunications, Ohio Bell Foundation, 1988-1989, \$500,000.

Executive Administrator, Inland Fisher Guide, United AutoWorkers, Ohio State University Cooperative Research Program, 1989-1992, \$530,000.

Other Related Experience.

Visiting Professor, New University of Lisbon, Lisbon, Portugal, Summer 1990

Editor, *Human Factors*, Journal of the Human Factors and Ergonomics Society, 1980-1983

Visiting Lecturer, Royal College of Art, London, England, Spring, 1979

Research Assistant, School of Industrial Engineering and Management, Oklahoma State University, September, 1967 - September, 1968

Instructor, Dept. of Industrial Engineer, Leigh University, September, 1960 - September, 1967

Instructor, York Campus, Pennsylvania State University, September, 1959 - September, 1960

Consulting.

Sole Proprietor, G. L. Smith Engineering and Management Consulting Services

Vice Presiden and Co-founder; LEXPERT; Scientific and Engineering Services for Attorneys

Senior Industrial Engineering Academic Consultant; Transportation Security Administration, U.S. Department of Homeland Security. 2002 – December 2003

Consultant to Industry: Includes work organizational transformation and strategic planning, productivity and performance measurement, methods improvement and work design, product design and incentives and standards. Expert witness: human performance, human factors engineering. Clients have been in electronics, heavy manufacturing, food and chemical processing, meat packing, and light manufacturing and assembly, and health care. Current practice focuses on health care: Grant/Riverside Methodist Hospitals, and Columbus, OH, Health Department. Not-for-profit service agencies: Legal Aid Society of Columbus, Action for Children.

Consultant to Labor Unions: Job evaluation and incentive standards, primarily associated with processing grievances toward arbitration. Past clients include United Food and Commercial Workers, Pottery and Ceramic Workers, Teamsters, and Glass Bottle Blowers. Has taught short courses in time study and work sampling to Meat Cutters, Glass Bottle Blowers and Machinist Unions, and Ohio AFL/CIO Summer School.

Consultant to Government: Performance measurement and productivity assessment. Office of Strategic Management and Analysis, Transportation Security Administration, U.S. Department of Homeland Security; U.S. Dept. of Agriculture (Food Stamp Division); the Ohio Adult Parole Authority; Cuyahoga Court of Common Pleas; the Ohio Department of Mental

Consulting (cont.)

George L. Smith, Ph.D., PE, May 2004

Health; the Ohio Industrial Commission; the Ohio Department of Development; the Ohio Department of Job and Family Services - Office of Ohio Health Plan; the Public Utility Commission of Ohio; Columbus Division of Fire; the Columbus Health Department, and the Botswana National Productivity Center.

Expert witness and Consultant to Attorneys: Human factors and ergonomics considerations in product and process design; Human behavior in various performance and equipment operating scenarios; Equipment guarding and warnings; Safety.

Scientific and Professional Societies.

Institute of Industrial Engineers: President Leigh Valley Chapter, 1967; President Columbus Chapter, 1978; Vice President, Columbus Chapter, 1997; Director, Ergonomics Division, 1976-1978; Vice President, Education and Research, 1988-1991; President, Society for Engineering and Management Systems, 1996-1999, Newsletter Editor 1999 – present; IIE Senior Vice President – Technical Networking, Effective April 2004; President, World Academy of Productivity Science, 2001 - present

Honors and Awards.

Fellow, Human Factors and Ergonomics Society
 Fellow, Institute of Industrial Engineers
 Fellow, World Academy of Productivity Science
 Everett D. Reese Medal, The Ohio State University - Leadership in Private Philanthropy, 1992 (Co-recipient, Campus Campaign Leadership)
 Raymond Q. Armington Award for Meritorious Achievement (OSU).
 Tau Beta Pi (Engineering Honorary)
 Sigma Xi (Research Honorary)
 Alpha Pi Mu (Industrial Engineering Honorary)
 Psi Chi (Psychology Honorary)
 C. E. MacQuigg Award (Outstanding Teaching, OSU, College of Engineering.)
 Institute of Industrial Engineers: Special Citation, Significant Accomplishment in Industrial Applications of Ergonomics, 1982; Distinguished Service Award as President of the Society for Engineering and Management Systems, 1997.
 Who's Who in America

Selected Books, Publications and Papers.

Books:

“Full Potential Utilization of Industrial and Systems Engineering in Organizations;” Chapter 1, *Handbook of Industrial Engineering*, Gavriel Salvendy. Ed, John Wiley and Sons, 2001, (with D. Scott Sink and David Poirier)

“Charting Techniques,” Chapter 17, *Maynard's Handbook of Industrial Engineering*, Kjell Zandin, Ed, H. B. Maynard, 2001, (with D. Loch)

“Defining and Organizing the Industrial Engineering Function” Chapter 1, *Maynard's Handbook of Industrial Engineering*, Kjell Zandin, Ed., H. B. Maynard, 2001, (with Scott Sink and David Poirier)

Work Measurement: A Systems Approach, Grid, Inc., 1978 (Out of print)

Selected Books, Publications and Papers (cont.).

Papers:

George L. Smith, Ph.D., PE, May 2004

"Balanced Scorecards and Performance Excellence," *Proceedings of the Annual Conference of the Institute of Industrial Engineers*, Houston Texas, May 2004

"Avoiding Crises: Planing Projects and Improving Processes," *American Hospital Radiologists Assoc., Proceedings of the 28th Annual Meeting*, Nashville TN, August 2000

"Customer Service and the New Industrial Engineer," *Proceedings of Solutions 2000*, Institute of Industrial Engineers, Cleveland, Ohio, May 2000

"Planning in Regulatory Agencies," *Proceedings of the 11th World Productivity Congress*, Edinburgh, Scotland, October 1999, (with John Yesso).

"All Performance Improvement begins with Situation Appraisal," *Proceedings of the 10th World Productivity Congress*, Santiago, Chile, October, 1997

"Performance Linkages: Understanding the Role of Planning and Measurement and Evaluation in Large Scale Organizational Change." *Productivity and Quality Management Frontiers IV*, Norcross, Georgia, Industrial Engineering and Management Press, 1992 (with D. S. Sink)

"Corporate Culture in Transition", *8th Annual IMC International Maintenance Conference, Proceedings of IMC Conference, Institute of Industrial Engineers*, Dallas, Texas, November 12-14, 1991

"Technology Isn't Enough", *Factory Automation and Information Management, Proceedings of Joint International Conference, FAIM 91*, Mohammad Munir Ahmad and William G. Sullivan, editors, CRC Press, 1991

"Individual Differences and Decision Making Using Various Levels of Aggregation of Information," *Journal of Management Information Systems*, autumn, 1988 (with A. Lederer)

"Work Measurement Under Attack: The IE's Response," *Proceedings of the IIE Integrated Systems Conference*, Nashville, TN, 1987

"A Cost/Benefit Analysis of Patient Education", *Hospital & Health Services Administration*, Ann Arbor, MI, July, 1986

"Driver Eye Movement Under Conditions of Prolonged Driving and Sleep Deprivation", *Highway Research Record*, No. 336, Washington, D.C., January, 1979

Work Measurement: A Systems Approach, Grid Incorporated, 1978

"Quantifying and Scaling Job Hazards", *Proceedings of the Annual Meeting of the American Institute of Industrial Engineers*, Dallas, TX, May, 1977

"Participatory Approaches to the Development of Productivity Measures", *Proceedings of the Annual Meeting of the Society for Management Information Systems*, Los Angeles, CA, September, 1977

"Developing an Interface Between Engineering and Social Sciences", Engineering Research Center, Educational Research and Methods Division of American Society for Engineering, Spring, 1976

"Making Consumer Concerns a Part of the Design Process", *AIIE Annual Systems Engineering Conference*, Las Vegas, NV, October, 1975

"Developing an Interface Between Engineering and the Social Sciences", *The American Psychologist*, Vol. 30, No. 11, November, 1975 (with Walsh and London)

"Inspection Performance on Microminiature Tasks", Chapter in *Human Reliability in Quality Control*, Ed. Drury and Fox, Taylor and Francis, Ltd., London, England, 1975